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| 09/662,630 | 09/15/2000 | Takao Miyazaki | 0879-0276P | 4062 |

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EXAMINER

JERABEK, KELLY L

| ART UNIT | PAPER NUMBER |
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2612

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|---------------------------------|--|
| Office Action Summary | Application No. 09/662,630 | Applicant(s) MIYAZAKI ET AL. | |
| | Examiner Kelly L. Jerabek | Art Unit 2612 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-9 and 11-22 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 7 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14,15 and 17-21 is/are allowed.
- 6) ☒ Claim(s) 1,3-5,8,9,11-13,16 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1, 3-5, 16, and 22 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 7/13/2005 have been fully considered but they are not persuasive.

Response to Remarks:

Applicant's arguments regarding claims 16 and 22 (Amendment page 13) state that the Tachi reference does not recite that each of the plurality of video cameras views a different individual wall screen of the video taking enclosure as disclosed by claims 16 and 22. The Examiner respectfully disagrees. Both the cameras (CM) and the LED matrices (EX) revolve around the person (A) (col. 4, lines 5-10). Therefore, it can be seen in figure 3 that each of the video cameras (CM) views a different individual wall screen (EX) of the tooth (BTA). **The applicant's arguments state that Tachi discloses in col. 6, lines 61-67 that its image pickup device rotate on their own axis. However, the image pickup device shown in figure 7 differs from the cameras CM of figure 3 cited in the final rejection (col. 6, lines 53-60).**

Applicant's arguments regarding claim 22 (Amendment page 14) state that amended claim 22 recites that video may be taken by one or more of the cameras of the subject and the background image by combining the subject and a background image view by a given camera. The arguments state that these features are not disclosed by Tachi. The Examiner respectfully disagrees. Tachi states that the LED matrices (EX) display a specific color (background image) at the moment when the person (A) is photographed by the cameras (CM) (col. 4, lines 34-36). Therefore, video of a subject (A) and a background image (specific color displayed on matrices EX) is taken by each of the cameras (CM) by combining the subject (A) and a background image (color displayed on EX) viewed by a given camera.

Initially, the Examiner notes that on page 17 of the Amendment, lines 12 and 18 the arguments refer to the Tachi reference which has not been applied to this claim. The Examiner will treat this as a typographical error and assume that it was meant to refer to the Silbelus reference. Applicant's arguments regarding claim 1 (Amendment pages 16-17) state that one of ordinary skill in the art would not look to Silbelus to modify Robley because Silbelus is not directed to solving the same type of problem facing Robley. The Examiner respectfully disagrees. Silbelus discloses in figure 3 a belted roller treadmill modified to serve as a potentiometer. The treadmill (194) is provided in a classroom floor (190) (col. 4, lines 20-36; fig. 3). Both the Silbelus and the Robley references disclose a treadmill that a person can walk on. The Silbelus

reference was cited to show that it is well known to recess a treadmill in a floor.

Therefore, it would have been obvious to include the concept of providing a treadmill in a floor as disclosed by Silbelus in the photography studio including a treadmill as disclosed by Robley. Doing so would provide a means for recessing a treadmill in a floor so that it is not an obstruction protruding from the floor (for example to avoid tripping, etc.)

Initially, the Examiner notes that on page 18 of the Amendment, lines 7, 9, and 17 the arguments refer to the Tachi reference which has not been applied to this claim. The Examiner will treat this as a typographical error and assume that it was meant to refer to the Silbelus reference. Applicant's arguments (Amendment page 18) state that the Office Action does not explain why one of ordinary skill in the art would be motivated to modify the Robley-Silbelus combination to include a remote control as taught by Cherry. The Examiner respectfully disagrees. Cherry discloses in figure 1 a treadmill including a control unit (20) for controlling a motor for driving the belt of the treadmill. The control unit (20) may be operated by the patient or may be removed for remote control (col. 3, lines 5-15). The Cherry reference was cited to show that it is well known to provide remote control of a treadmill. Therefore, it would have been obvious to include the treadmill capable of remote control as disclosed by Cherry in the photography studio including a treadmill disclosed by Robley in view of Silbelus. **Doing so would provide a means for controlling the speed of a motor for driving the belt of a treadmill using a remote control unit (Cherry: col. 3, lines 5-15).**

Applicant's arguments (Amendment page 19) state that the rejection of claim 4 is improper for the reasons stated above regarding claim 1. Therefore, the response to this traverse is the same as claim 1 above.

Applicant's arguments (Amendment page 20) state that the rejection of claim 5 is improper for the reasons stated above regarding claim 1. Therefore, the response to this traverse is the same as claim 1 above.

Applicant's arguments (Amendment page 21) state that the Rodriguez reference teaches away from using a flat wall as a screen in a video projection system. The Examiner respectfully disagrees. Rodriguez Jr. discloses in figures 1 and 2 an integrated front projection system. Rodriguez Jr. states that it is well known in the art that images may be projected on a large clear flat surface such as a wall. Although Rodriguez Jr. discloses alternative projection surfaces, the Examiner is using the Rodriguez Jr. reference to show that it is well known to project images onto a wall. Therefore, it would have been obvious to include the concept of projecting images onto a wall as disclosed by Rodriguez in the photography studio including a projector as disclosed by Robley in view of Silbelus. Doing so would provide a means for placing a projector in a room that may afford the projection volume necessary for image expansion without any physical obstructions (Rodriguez Jr.: col. 2, lines 36-38).

Applicant's arguments (Amendment page 22) state that the rejection of claim 9 is improper for the reasons stated above regarding claim 8. Therefore, the response to this traverse is the same as claim 8 above.

Applicant's arguments (Amendment page 23) state that the Office Action does not explain why one of ordinary skill in the art would be motivated to modify the Robley-Silbelus-Rodriguez combination to include a remote control as taught by Cherry. The Examiner respectfully disagrees. Cherry discloses in figure 1 a treadmill including a control unit (20) for controlling a motor for driving the belt of the treadmill. The control unit (20) may be operated by the patient or may be removed for remote control (col. 3, lines 5-15). The Cherry reference was cited to show that it is well known to provide remote control of a treadmill. Therefore, it would have been obvious to include the treadmill capable of remote control as disclosed by Cherry in the photography studio including a treadmill disclosed by Robley in view of Silbelus and further in view of Rodriguez Jr.. Doing so would provide a means for controlling the speed of a motor for driving the belt of a treadmill using a remote control unit (Cherry: col. 3, lines 5-15).

Applicant's arguments (Amendment page 24) state that the rejection of claim 12 is improper for the reasons stated above regarding claim 8. Therefore, the response to this traverse is the same as claim 8 above.

Applicant's arguments (Amendment page 25) state that the office action does not address the significant differences in the size and arrangement of the scenes in Robley and the size and arrangement of parts on a conveyor belt in Bourn. The office action states Bourn discloses in figure 1A a machine-vision illumination system (100) including a camera (140) (col. 6, lines 19-33). The camera (140) views an object (160) through an opening in a ring-reflector illumination source (200) (col. 6, lines 27-33). Thus, the ring-reflector illumination source (200) encloses the camera. The ring-reflector illumination source (200) of the machine-vision illumination system (100) serves to reduce shadows of the object (col. 17, lines 8-17). Therefore, it would have been obvious to include the ring-reflector illumination source (200) of the machine-vision illumination system (100) disclosed by Bourn in the photography studio disclosed by Robley in view of Silbelus in view of Rodriguez Jr. Doing so would provide a means for generating a light source from more than one point source with suitable brightness in order to reduce shadows (Bourn: col. 17, lines 8-12). The Examiner asserts that shadow effects exist in both large stage scenes and in small article inspection environments. Therefore, since the ring illumination source enclosing a camera serves to reduce shadows it would have been obvious for one skilled in the art to have been motivated to include a ring illumination source as disclosed by Bourn in the photography studio disclosed by the combination of Robley-Silbelus-Rodriguez, Jr for the purpose of reducing shadows.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and ^{are}3 rejected under 35 U.S.C. 103(a) as being unpatentable over Robley et al. US 5,061,061 in view of Silbelus US 5,225,804 and futher in view of Cherry US 3,711,812.

Re claims 1 and 3, Robley discloses in figure 1 a photography system including a studio (10) or "video taking box" that accommodates an actor (21). The studio (10) includes projectors (42,44,46) that project images on projection screens (12,22) of the studio (col. 5, lines 64-68; col. 6, lines 1-16). The projectors (42,44,46) read out and project background images onto the projection screens (12,22) (col. 6, lines 1-29). The camera (14) faces the projection screen (12) and takes an image of an actor (21) and superimposes the image of the actor on the background image formed on the projection screens (12,22) (col. 6, lines 17-40). In addition, Robley states that for scenes requiring coordinated motion between the staged scene and background scene actors can be

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placed on treadmills (col. 5, lines 4-17). Therefore, it can be seen that the speed of a treadmill and the moving speed of a background image are controlled in order to synchronize (coordinated motion) both of the speeds. Although Robley discloses all of the above limitations he fails to distinctly state that a treadmill is provided in a floor in which the subject is located.

Silbelus discloses in figure 3 a belted roller treadmill modified to serve as a potentiometer. The treadmill (194) is provided in a classroom floor (190) (col. 4, lines 20-36; fig. 3). Therefore, it would have been obvious to include the concept of providing a treadmill in a floor as disclosed by Silbelus in the photography studio including a treadmill as disclosed by Robley. Doing so would provide a means for providing the exposed surfaces of the belted rollers of the treadmill (194) so that they are flush with the floor (190) (Silbelus: col. 4, lines 20-31). Robley in view of Silbelus discloses all of the limitations above. Although Robley in view of Silbelus displays the synchronization of treadmill speed and the moving speed to the background image, the combined teaching does not state that the speed of the treadmill and the speed of the background are changed by the subject with a remote control operation.

Cherry discloses in figure 1 a treadmill including a control unit (20) for controlling a motor for driving the belt of the treadmill. **The control unit (20) may be operated by the patient (col. 3, lines 5-15).** Therefore, it would have been obvious to include the treadmill capable of remote control as disclosed by Cherry in the photography studio including a treadmill disclosed by Robley in view of Silbelus. Doing so would provide a

means for controlling the speed of a motor for driving the belt of a treadmill using a remote control unit (Cherry: col. 3, lines 5-15).

Claim 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Robley et al. in view of Silbelus in view of Cherry and further in view of Barwacz et al. US 5,986,718.

Re claim 4, Robley in view of Silbelus in view of Cherry includes all of the limitations of claim 1 above. Although Robley in view of Silbelus in view of Cherry discloses a photography studio for superimposing images of an actor with a background image, the combination does not explicitly disclose illumination devices that illuminate the subject and that adjust color temperature and brightness in accordance with the color temperature and brightness of the background image.

Barwacz discloses in figure 3 a photobooth (10) that forms a composite image (fig. 1C) from a subject in the foreground (fig. 1A) and a pre-stored background (fig. 1B) using a chroma-key technique (col. 1, lines 29-67). The photobooth (10) includes illumination lights (80a, 80b, 90a, 90b) that have variable color temperatures in accordance with the color temperature and brightness of the background image (col. 9, lines 13-67) according to a chroma-key technique. Therefore, it would have been obvious to include the illumination devices that have varying color temperature according to the color temperature and brightness of a background image and the chroma-key technique disclosed by Barwacz in the photography studio disclosed by

Robley in view of Silbelus in view of Cherry. Doing so would provide a means for preventing a foreground subject from appearing transparent in a composite image (Barwacz: col. 9, lines 55-67).

Claim 5 rejected under 35 U.S.C. 103(a) as being unpatentable over Robley et al. in view of Silbelus in view of Cherry and further in view of Honda et al. US 2004/0201764.

Re claim 5, Robley in view of Silbelus in view of Cherry includes all of the limitations of claim 1 above. Although Robley in view of Silbelus in view of Cherry discloses a photography studio including a video camera for superimposing images of an actor with a background image, the combination does not explicitly state that sound is reproduced so as to record the sound with video taking.

Honda discloses in figure 5 a video camera capable of reproducing sound. The video camera includes a microphone (C34) for picking up sound and a speaker (C33) for reproducing the picked up sound (page 5, paragraph 82). Therefore, it would have been obvious to include a video camera including a microphone for recoding sound with video taking as disclosed by Honda in the photography studio including a video camera as disclosed by Robley in view of Silbelus in view of Cherry. Doing so would provide a means for picking up sound while recording an image (Honda: page 5, paragraphs 81 – 82).

Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Robley et al. in view of Silbelus and further in view of Rodriguez, Jr. US 6,179,426.

Re claim 8, Robley discloses in figure 1 a photography system including a studio (10) or "video taking box" that accommodates an actor (21). The studio (10) includes projectors (42,44,46) that project images on projection screens (12,22) of the studio (col. 5, lines 64-68; col. 6, lines 1-16). The projectors (42,44,46) store, read out and project background images onto the projection screens (12,22) (col. 6, lines 1-29). The camera (14) faces the projection screen (12) and takes an image of an actor (21) and superimposes the image of the actor on the background image formed on the projection screens (12,22) (col. 6, lines 17-40). In addition, Robley states that for scenes requiring coordinated motion between the staged scene and background scene actors can be placed on treadmills (col. 5, lines 4-17). Therefore, it can be seen that the speed of a treadmill and the moving speed of a background image are controlled in order to synchronize (coordinated motion) both of the speeds. Although Robley discloses all of the above limitations he fails to distinctly state that a treadmill is provided in a floor in which the subject is located.

Silbelus discloses in figure 3 a belted roller treadmill modified to serve as a potentiometer. The treadmill (194) is provided in a classroom floor (190) (col. 4, lines 20-36; fig. 3). Therefore, it would have been obvious to include the concept of providing a treadmill in a floor as disclosed by Silbelus in the photography studio including a treadmill as disclosed by Robley. Doing so would provide a means for providing the

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exposed surfaces of the belted rollers of the treadmill (194) so that they are flush with the floor (190) (Silbelus: col. 4, lines 20-31). Although the combination of Robley and Silbelus discloses all of the above limitations, the combination fails to state that the projector displays an image on a screen being a wall of the video taking box.

Rodriguez Jr. discloses in figures 1 and 2 an integrated front projection system. Rodriguez Jr. states that it is well known in the art that images may be projected on a large clear flat surface such as a wall. Therefore, it would have been obvious to include the concept of projecting images onto a wall as disclosed by Rodriguez in the photography studio including a projector as disclosed by Robley in view of Silbelus. Doing so would provide a means for placing a projector in a room that may afford the projection volume necessary for image expansion without any physical obstructions (Rodriguez Jr.: col. 2, lines 36-38).

Claim 9 rejected under 35 U.S.C. 103(a) as being unpatentable over Robley et al. in view of Silbelus further in view of Rodriguez Jr. and further in view of Honda et al.

Re claim 9, Robley in view of Silbelus and further in view of Rodriguez Jr. includes all of the limitations of claim 8 above. Although Robley in view of Silbelus in view of Rodriguez Jr. discloses a photography studio including a video camera for superimposing images of an actor with a background image, the combination does not

explicitly state that studio includes a speaker, an audio storing device, an audio reproducing device, and a recording device with a microphone.

Honda discloses in figure 5 a video camera capable of reproducing sound. The video camera includes a microphone (C34) for picking up sound. The picked-up sound is then processed by a sound processor (C31). Next, the processed signals are transmitted to a recording/reproduction converter (C25), a speaker (C33), and an output port (C32) (page 5, paragraph 82). Therefore, it would have been obvious to include a video camera including a microphone for recording sound with video taking as disclosed by Honda in the photography studio including a video camera as disclosed by Robley in view of Silbelus in view of Rodriguez Jr. Doing so would provide a means for picking up sound while recording an image (Honda: page 5, paragraphs 81 – 82).

Claim 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Robley et al. in view of Silbelus further in view of Rodriguez Jr. and further in view of Cherry.

Re claim 11, Robley in view of Silbelus in view of Rodriguez Jr. includes all of the limitations of claim 8 above. Although Robley in view of Silbelus in view of Rodriguez Jr. displays the synchronization of treadmill speed and the moving speed to the background image, the combined teaching does not state that the speed of the treadmill and the speed of the background are changed with a remote control operation.

Cherry discloses in figure 1 a treadmill including a control unit (20) for controlling a motor for driving the belt of the treadmill. The control unit (20) may be operated by the patient or may be removed for remote control by an attending physician (col. 3, lines 5-15). Therefore, it would have been obvious to include the treadmill capable of remote control as disclosed by Cherry in the photography studio including a treadmill disclosed by Robley in view of Silbelus in view of Rodriguez Jr. Doing so would provide a means for controlling the speed of a motor for driving the belt of a treadmill using a remote control unit (Cherry: col. 3, lines 5-15).

Claim 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Robley et al. in view of Silbelus further in view of Rodriguez Jr. and further in view of Barwacz et al.

Re claim 12, Robley in view of Silbelus in view of Rodriguez Jr. includes all of the limitations of claim 8 above. Although Robley in view of Silbelus in view of Rodriguez Jr. discloses a photography studio for superimposing images of an actor with a background image, the combination does not explicitly disclose illumination devices that illuminate the subject and that adjust color temperature and brightness in accordance with the color temperature and brightness of the background image.

Barwacz discloses in figure 3 a photobooth (10) that forms a composite image (fig. 1C) from a subject in the foreground (fig. 1A) and a pre-stored background (fig. 1B) using a chroma-key technique (col. 1, lines 29-67). The photobooth (10) includes

illumination lights (80a, 80b, 90a, 90b) that have variable color temperatures in accordance with the color temperature and brightness of the background image (col. 9, lines 13-67) according to a chroma-key technique. Therefore, it would have been obvious to include the illumination devices that have varying color temperature according to the color temperature and brightness of a background image and the chroma-key technique disclosed by Barwacz in the photography studio disclosed by Robley in view of Silbelus in view of Rodriguez Jr. Doing so would provide a means for preventing a foreground subject from appearing transparent in a composite image (Barwacz: col. 9, lines 55-67).

Claim 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Robley et al. in view of Silbelus further in view of Rodriguez Jr. and further in view of Bourn et al. US 6,022,124.

Re claim 13, Robley in view of Silbelus in view of Rodriguez Jr. includes all of the limitations of claim 8 above. However, Robley in view of Silbelus in view of Rodriguez Jr. does not state that a ring light encloses the television cameras and serves as an illumination device for illuminating the object.

Bourn discloses in figure 1A a machine-vision illumination system (100) including a camera (140) (col. 6, lines 19-33). The camera (140) views an object (160) through an opening in a ring-reflector illumination source (200) (col. 6, lines 27-33). Thus, the ring-reflector illumination source (200) encloses the camera. The ring-reflector

illumination source (200) of the machine-vision illumination system (100) serves to reduce shadows of the object (col. 17, lines 8-17). Therefore, it would have been obvious to include the ring-reflector illumination source (200) of the machine-vision illumination system (100) disclosed by Bourn in the photography studio disclosed by Robley in view of Silbelus in view of Rodriguez Jr. Doing so would provide a means for generating a light source from more than one point source with suitable brightness in order to reduce shadows (Bourn: col. 17, lines 8-12).

Claims 16 and 22 rejected under 35 U.S.C. 103(a) as being unpatentable over Tachi et al. US 6,836,286 in view of Suyama et al. US 6,469,683.

Re claims 16 and 22, Tachi discloses in figure 1 a video-conference system (1) including two cylindrical booths (BTA, BTB) capable of producing images in virtual space (VS1) so as to enable the persons (A, B) to feel as if they met together in a room (col. 3, lines 55-61). Each cylindrical booth (BTA, BTB) is a video taking enclosure having a plurality of individual walls (examiner is reading location of each LED matrix (EX) as an individual wall) that accommodate a subject (figure 3). The cylindrical booth (BTA) comprises a plurality of cameras (CM) and a plurality of full-color LED matrixes (EX) (col. 3, line 66 – col. 4, line 4). The video-conference system includes multiplexers (12a, 12b) for selecting linear images (CAL) picked up by the cameras (CM) and image construction units (13a, 13b) for providing final images by displaying the linear images (CAL) on the LED matrixes (EX) (col. 4, lines 50-67). Therefore, since images are

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displayed on the LED matrixes (EX) the Examiner is reading them as wall screens.

Additionally, Tachi states that the images afforded to the persons (A, B) are dynamic and they are afforded in real time (col. 5, lines 41-45). Both the cameras (CM) and the LED matrixes (EX) revolve around the person (A) (col. 4, lines 5-10). Therefore, it can be seen in figure 3 that each of the video cameras (CM) views a different individual wall screen (EX) of the booth (BTA). Tachi also states that the LED matrices (EX) display a specific color at the moment when the person (A) is photographed by the cameras (CM) (col. 4, lines 34-36). Therefore, video is taken by each of the cameras (CM) by combining the subject (A) and a background (color displayed on EX) viewed by a given camera. Although Tachi discloses all of the above limitations, the linear images (CAL) are displayed on LED matrixes (EX) and thus the Tachi reference doesn't explicitly state that a sequence of images is displayed by a plurality of projectors.

Suyama discloses in figure 40 a three-dimensional display device for displaying an image. Suyama states that the two-dimensional display device (61) may be any one of well known display devices such as a liquid crystal display, an LED display, a plasma display, a projector type display, or a vector-scanning type display (col. 29, lines 2-13). Thus, Suyama demonstrates that it is well known to supplement various types of display devices such as LED displays and projector type displays with one another. Therefore, it would have been obvious for one skilled in the art to have been motivated to replace the LED matrixes for displaying linear images (CAL) as disclosed by Tachi with a projection type display as disclosed by Suyama.

Allowable Subject Matter

Claims 14-15 and 17-21 allowed.

The following is an examiner's statement of reasons for allowance:

Re claims 14 and 15, the prior art fails to teach or suggest, "A video image producing apparatus comprising: ... wherein the entire wall of said video taking box is the screen, and a plurality of pairs of video cameras and illumination devices are built in said screen".

Re claim 17, the prior art fails to teach or suggest, "A video image producing method comprising: ... wherein the video is taken by a camera having a straight line of sight to a projector".

Re claim 18, the prior art fails to teach or suggest, "A video image producing method comprising: ... wherein the plurality of projectors do not directly illuminate the subject".

Re claims 19-20, the prior art fails to teach or suggest, "A video image producing method comprising: ... selecting from at least one of the plurality of video cameras to

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take the video, wherein each of the plurality of cameras directly views the subject and one of a plurality of screens”.

Re claim 21, the prior art fails to teach or suggest, “A video image producing method comprising: ...displaying a plurality of movies on the plurality of screens, wherein each one of the plurality of movies is separately displayed on each screen of the plurality of screens, and further wherein the plurality of screens surround the subject”.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelly L. Jerabek whose telephone number is **(571) 272-7312**. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Ngoc Yen Vu can be reached on **(571) 272-7320**. The fax phone number

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for submitting all Official communications is 703-872-9306. The fax phone number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the Examiner at **(571) 273-7312**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KLJ


NGOC-YEN VU
PRIMARY EXAMINER